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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/542,599

07/14/2005

Bjorn Sjolander

513.1162USN

7282

33369 7590 04/11/2007  
FASTH LAW OFFICES (ROLF FASTH)  
26 PINECREST PLAZA, SUITE 2  
SOUTHERN PINES, NC 28387-4301

EXAMINER

MORGAN, EILEEN P

ART UNIT

PAPER NUMBER

3723

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/11/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/542,599	SJOLANDER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Eileen P. Morgan	3723	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 14 July 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-22 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1, 'the grinding cup' lacks antecedent basis. How is the cup structurally related to the machine? Via the pin?

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1,4,6,10-22 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Sjolander et al. –Ca 2313685.

Sjolander discloses a grinding machine for grinding tips of drill bits. Tilttable tables means for holding drill bits (claim 1), a support system to provide feed pressure during grinding, the machine having a rotating pin/ grinding cup to be rotated at a controlled speed and fed at a controlled pressure, wherein the support system includes an arm system comprising two arms, one for vertical movement, one for horizontal movement

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(page 4, line 28-page 5, line 7), the grinding machine being self centering (page 5, line 31) and having a biased side load (page 6, line 8), wherein the support system includes means for providing pressure when not in use and feed pressure when in use (page 5, line 28), wherein the table has one or more openings to hold bits, the tilting action consists of a side arcuate slot (13) with a linear actuator (16), the table is provided with means to release pressure of locking the bit, so as to allow rotation without full release (page 3, line 15),

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 2,3 rejected under 35 U.S.C. 103(a) as being unpatentable over Sjolander in view of Taninaga et al.-5,711,697.

Sjolander discloses the claimed invention as detailed above, but does not specify that the grinding cup speed and pressure can be varied during a grinding cycle. However, Taninaga teaches a grinding machine wherein the speed and pressure of the rotating grinding tip can be varied during a grinding cycle (Abstract, column 2, lines 30-45). Therefore, it would have been obvious to one of ordinary skill in the art at time invention was made to provide the grinder of Sjolander with a speed and load control system, as taught by Taninaga, in order to precisely shape workpiece with high accuracy, thereby eliminating unevenness.

Claims 5,9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sjolander in view of Hori-6,612,908.

Sjolander discloses the claimed invention as detailed above, but does not specify that the grinder motor has a frequency inverter. However, Hori teaches a grinding machine wherein the grinding machine includes a motor and frequency invert (11). Therefore, it would have been obvious to one of ordinary skill in the art at time invention was made to provide the grinder of Sjolander with a frequency inverter, as taught by Hori, in order to accurately control the rotational speed of electric motor.

Claims 7,8 rejected under 35 U.S.C. 103(a) as being unpatentable over Sjolander in view of Gudmundsson-5,193,312.

Sjolander discloses the claimed invention as detailed above, but does not specify that the grinding coolant is used for both the tool and motor, nor wherein the grinding machine has orbital rotation. However, Gudmundsson teaches a grinding machine wherein the rotational movement can be orbital (col.4, line 24) and wherein the coolant is used for tool and motor (col. 4, lines 32-35). Therefore, it would have been obvious to one of ordinary skill in the art at time invention was made to provide the grinder of Sjolander with orbital rotation, as taught by Gudmundsson, in order to precisely grind workpiece according to desired shape. And, it would have been obvious to one of ordinary skill in the art at time invention was made to provide the grinder of Sjolander with a coolant for both motor and tool, as taught by Gudmundsson, in order to simplify grinder and conserve parts.

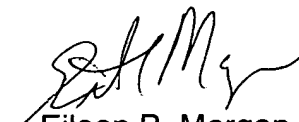
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eileen P. Morgan whose telephone number is 571.272.4488. The examiner can normally be reached on Monday-Thursday, 7am-3:30pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Hail can be reached on 571.272.4485. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EM  
March 28, 2007



Eileen P. Morgan  
Primary Examiner